An Ophthalmologic Summit for On-Orbit Care

Authors: Bacal, Paul, McCulley Reviewers: Hamilton, Sargsyan

Introduction: Ophthalmologic issues are a source of concern for NASA flight surgeons, due to the remote nature of the space station as well as the microgravity environment. Methods: A panel of external consultants was convened to evaluate the adequacy of the current in-flight medical system for the diagnosis and treatment of ophthalmologic issues. Participants were acknowledged experts in their field who also had experience in operational medicine. Results: Nine extramural experts provided assistance, and six of them participated in a face to face meeting held at NASA-Johnson Space Center. Changes were recommended for the space station pharmacopoeia, and diagnostic, therapeutic, and deorbit criteria protocols for a variety of ocular conditions were developed. Discussion: The results of the panel provide an evidence based approach to the diagnosis and care of ophthalmologic conditions on the International Space Station.